

Abstract

A system and method for dividing a received database query into a number of parallel subqueries and then submitting the parallel subqueries to a database management system in place of the received query. During database configuration, an embodiment of the invention ensures that a database table includes a partitioning field populated with random numbers. Each time a record is added to the table, an embodiment fills the partitioning field with a new random number. When a query on the database table is received, an embodiment determines a number of parallel subqueries to submit in place of the received query. Each of the parallel subqueries is constructed based on the initially received query combined with an additional constraint on the partitioning field such that the set of parallel subqueries together span the entire range of the random numbers in the partitioning field, and yet each of the parallel subqueries describes a discrete non-overlapping range of the partitioning field. The constraint on the partitioning field (*i.e.*, the size of each range of random numbers) may be determined by trial queries on the database. Finally, an embodiment submits the parallel subqueries to the database management system in place of the received query.